Glasgow City Council

Environment Sustainability and Carbon Reduction City Policy Committee

Report by Executive Director, Neighbourhoods and Sustainability

Contact: Davy Russell Ext: 76512

STREET LITTER BIN REPLACEMENT PROGRAMME UPDATE

Purpose of Report:
To update committee on the Street Litter Bin Replacement Programme.

Recommendations:
It is recommended that committee notes the progress made to date.

Ward No(s): Citywide: ✓
Local member(s) advised: Yes ☐ No ☐ consulted: Yes ☐ No ☐

PLEASE NOTE THE FOLLOWING:
Any Ordnance Survey mapping included within this Report is provided by Glasgow City Council under licence from the Ordnance Survey in order to fulfil its public function to make available Council-held public domain information. Persons viewing this mapping should contact Ordnance Survey Copyright for advice where they wish to licence Ordnance Survey mapping/map data for their own use. The OS web site can be found at <http://www.ordnancesurvey.co.uk>.

If accessing this Report via the Internet, please note that any mapping is for illustrative purposes only and is not true to any marked scale.
1. **Introduction**

At its meeting on 12 June 2018, the Environment Sustainability and Carbon Reduction City Policy Committee requested a report regarding the implementation of the Street Litter Bin Replacement Programme. (See undernoted link).


This report will outline the early successes and some of the challenges experienced in Phase 1. The Street Litter Bin Replacement Programme team has worked with key stakeholders to formulate action plans to respond to these challenges and address any issues which have arisen.

2. **Background**

Land and Environmental Services’ (LES) has responsibility for managing street bin collections across the city. This vital role aims to deliver the highest level of cleanliness for both citizens and visitors to the city while delivering value for money.

The existing street bin infrastructure throughout the city was reviewed to determine the total number of bins, type of bin, capacity of bin and condition of bin.

Of the total number (in excess of 9000), 59% of all bins throughout the city are pole mounted - these are ineffective as they have very limited capacity and quickly overflow. The remaining bins are fixed and free standing bins which are difficult to service, have limited capacity and also require 854k plastic sacks each year (at a cost of £60k per financial year). As these plastic sacks are placed adjacent to bins awaiting uplift, they can split, resulting in street cleanliness issues, public health concerns and complaints from residents.

Following approval by full Council at its meeting in February 2018, £3m was secured to invest to improve the city street litter bin provision.

Funding was also secured from Smart Cities (Scotland) to pilot 400 smart bin sensors which are mounted within the bin housings. During a 12 month pilot, we will be able to monitor the fill rate of bins which will enable data to be collected, allowing the service to co-ordinate its operational resources more effectively.

This programme is investing in the city’s street bin infrastructure by replacing the current ineffective bins with larger capacity units and introducing smart technology. This approach will increase the overall capacity of waste by at least 50% in most areas and will streamline the service making it easier and quicker to manage while significantly reducing costs.

The Street Bin Replacement Programme is an opportunity to -

- Improve the street litter bin containment in local neighbourhoods across the city by providing large capacity bin housings;
• Improve the quality of the environment for residents in neighbourhoods and visitors to the city;
• Reduce the number of bins but increase capacity throughout the city;
• Remove existing ineffective pole mounted, fixed and free standing bins;
• Improve operational efficiencies utilising the latest smart sensor technology and route optimisation;
• Work in partnership with key local stakeholders to ensure bin placement is appropriate in neighbourhood areas;
• Increase opportunities to engage with residents.

3. Street Bin Deployment Programme

A procurement exercise was undertaken between November 2017 and January 2018 following which an order was placed with the Supplier for a mixture of 140L, 240L and 360L Bin Housings. Blue Recycling Bin Housings were also procured for the City Centre. The replacement bin housings utilise a wheeled bin and do not require a plastic refuse sack.

With the introduction of smart sensors to the bin housings during a 12 month pilot, monitoring of the fill rate of bins will enable data to be collected, allowing the service to coordinate its operational resources more effectively.

Phase 1 commenced in April 2018 in the following neighbourhood areas:

<table>
<thead>
<tr>
<th>Area</th>
<th>Number of Bins Deployed</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Centre</td>
<td>451</td>
</tr>
<tr>
<td>Dennistoun</td>
<td>108</td>
</tr>
<tr>
<td>Gorbals</td>
<td>82</td>
</tr>
<tr>
<td>Priesthill/Househillwood</td>
<td>61</td>
</tr>
<tr>
<td>Drumchapel</td>
<td>92</td>
</tr>
<tr>
<td>Govanhill</td>
<td>149</td>
</tr>
<tr>
<td><strong>Total Bins Deployed</strong></td>
<td><strong>943</strong></td>
</tr>
<tr>
<td><strong>% of Programme Deployments</strong></td>
<td><strong>18%</strong></td>
</tr>
</tbody>
</table>

Phase 1 was successfully completed in July 2018, four of the areas to receive new street litter bins were Thriving Places areas and 400 smart bin sensors were fitted to bins in these areas.

During Phase 1 we have also conducted trials of solar compacting bins in the city centre with two suppliers, a third supplier trial commenced on 21 August 2018 for a 12 week period.
Following a review of the Phase 1 implementation, the Programme Steering Group met to discuss and agree the scheduling of the phase 2 deployment of street litter bins throughout the city on a Ward/Neighbourhood basis.

Phase 2 commenced in September 2018 and is anticipated to be completed by March 2020. Timescales for implementation are shown below -

<table>
<thead>
<tr>
<th>Area</th>
<th>Implementation Timescale</th>
</tr>
</thead>
<tbody>
<tr>
<td>North West</td>
<td>September 2018 - February 2019</td>
</tr>
<tr>
<td>North East</td>
<td>March 2019 - September 2019</td>
</tr>
<tr>
<td>South</td>
<td>October 2019 - March 2020</td>
</tr>
</tbody>
</table>

4. **Successes in Phase 1**

Phase 1 was completed on 14 July 2018.

<table>
<thead>
<tr>
<th>Original Street Litter Bins</th>
<th>New Street Litter Bins</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,433 removed</td>
<td>943 installed</td>
</tr>
<tr>
<td>141,000 litres capacity</td>
<td>238,000 litres capacity</td>
</tr>
</tbody>
</table>

- The percentage increase in capacity for Phase 1 is 60%.

Regular Steering Group and Project Working group meetings were held throughout phase 1 to manage the procurement process, the deployments and any issues arising. Due to the success of the bin deployments in Phase 1, the decision was taken by the group to accelerate the Govanhill neighbourhood into Phase 1 to support operational challenges. Govanhill received new street litter bins across the weekend of 14-15 July 2018.

In the planning and implementation of Phase 1, there were a number of successes and approaches which worked well:

- **Effective communications strategy**
  The communications strategy provided successful engagement at all levels. Key stakeholders responded positively to the communication and engagement they received throughout Phase 1.

- **Working in partnership with local stakeholders to Implement Bin Deployments in Neighbourhood Areas**
  The Street Litter Bin Replacement team has worked in partnership with various organisations in all Phase 1 Areas; engagement with Elected Members, Community Councils, Residents Community Groups and Housing Associations.
The feedback we received from all stakeholders was overwhelmingly positive following the implementation of the Phase 1 Areas.

For examples refer to Appendix 1 attached.

- **Increased opportunities to engage and interact with residents**
  The Street Litter Bin Replacement Programme is an opportunity to not only improve the Street Litter Bin provision but also to engage with residents. Through the citizen engagement events and face to face meetings with residents, the Street Litter Bin Replacement team has been able to receive valuable feedback on the programme to inform future deployments.

- **Pre and Post Street Litter Bin Implementation Surveys**
  Surveys were undertaken with a small sample of residents prior to and following our new larger capacity street litter bins being deployed across Drumchapel, Priesthill/Househillwood, Gorbals and Dennistoun. The purpose of the pre-survey was to determine residents’ opinions of the older style pole mounted and free standing bins and issues identified to compare the effectiveness of the newly installed larger capacity bins with the post survey. These surveys help gauge, along with other intelligence including smart sensor data, Keep Scotland Beautiful street litter monitoring and operative feedback, the effectiveness of our new larger capacity bins. High level results were as follows-

<table>
<thead>
<tr>
<th>Neighbourhood</th>
<th>Number of people surveyed Pre-installation</th>
<th>Pre-installation bin satisfaction</th>
<th>Number of people surveyed Post-installation</th>
<th>Post-installation bin satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drumchapel</td>
<td>22</td>
<td>95% (poor/very poor)</td>
<td>26</td>
<td>92% (good/very good)</td>
</tr>
<tr>
<td>Priesthill/Househillwood</td>
<td>28</td>
<td>100% (poor/very poor)</td>
<td>29</td>
<td>86% (good)</td>
</tr>
<tr>
<td>Gorbals</td>
<td>24</td>
<td>96% (poor/very poor)</td>
<td>24</td>
<td>100% (good/very good)</td>
</tr>
<tr>
<td>Dennistoun</td>
<td>28</td>
<td>100% (poor/very poor)</td>
<td>32</td>
<td>97% (good/very good)</td>
</tr>
</tbody>
</table>

- **Keep Scotland Beautiful (KSB) Audit**
  As part of the Phase 1 Pilot Keep Scotland Beautiful was engaged to carry out audits within the 4 thriving places neighbourhoods. KSB¹ is one of the leading organisations in Scotland who provides advice and support to help create and maintain cleaner, safer and healthier local environments. These audits were carried out before and after the roll out of the larger capacity street litter bins to assess changes in people’s behaviour, types of waste found in bins and cleanliness of streets. This study allowed a comparison of use of the older freestanding/lamppost bins against the new 240litre bins and to identify changes in street cleanliness at these locations.

¹ [https://www.keepscotlandbeautiful.org](https://www.keepscotlandbeautiful.org)
Initial findings have been very positive. Whilst there has been a slight increase in domestic/commercial waste within these bins (0.8% and 1.9% respectively) there was a significant improvement in street cleanliness in all areas surveyed. These improvements are most likely attributed to the new bins being more visible and due to the larger capacity/design there is less chance of bins overflowing or windblown litter coming from these units.

- **Recycling Bins in City Centre**
  To compliment the project and promote recycling on the go, Phase 1 also included a pilot of Blue Recycling Bin Housings in the City Centre. These bins have been located directly next to the General Litter Bin Housings, waste from the Blue Recycling Bins was analysed and the recylcate rate was approximately 95%.

5. **Challenges in Phase 1**

There have been some challenges in Phase 1, however, the Street Litter Bin Replacement Programme team has worked hard to implement action plans to address these issues.

Several specific challenges have been noted with the new units and as a consequence, they have already informed the roll-out to the pilot neighbourhoods and will further inform the wider deployment commencing in September 2018.

The identified issues and proposed solutions are summarised in Appendix 2.

6. **Communications and Stakeholder Engagement:**

A variety of engagement and communication has been successfully undertaken or is planned around the Street Litter Bin Replacement Programme.

- **Bespoke Information Packs**
  Bespoke information packs have been distributed to elected members, housing associations and community councils in Phase 1 and continue to be created for Phase 2 areas. These packs contain information on the background to the programme, benefits to be realised and dates for local implementation.

- **Area Partnerships**
  Presentations, tailored to each ward, have been delivered to Area Partnerships covering the north west. These have provided community councils and elected members with timely information on the Street Bin Replacement Programme and allowed elected members to provide feedback face to face with officers. This feedback at a local level is important to identify any issues and inform the deployments in their areas. As part of this approach, officers will attend future Area Partnerships in Phase 2 areas where new street litter bins have been deployed to enable a review of the success and feedback to improve future deployments to be undertaken.
• **Citizen Engagement Events**

Four citizen engagement events were held across the city in strategic locations between 31 May and 21 June 2018 with the key message of ‘Investing in Your Neighbourhood’. The purpose of these sessions were to ‘go to where people are’ and encourage discussion and feedback on the investment taking place across the city in relation to Street Litter Bin Replacement (also the Bin Replacement Programme and recycling). These events were very well attended (258 people) and the response was highly positive with 92% of residents being in favour of larger capacity Street Litter Bins.

Comments from residents included:
“*The big bins are so much better*”.
“*Those ones on poles just overflow and cause mess*”.
“*These look good but it's more than just giving us more bins, we need to stop people dropping litter*”.

Overall, the direct face to face engagement with key stakeholders worked particularly well. Indeed, over 90% of attendees at the events agreed that local events are a beneficial way to engage with residents. Future citizen engagement activity will be informed by the lessons learned from this approach.

• **Digital Engagement**

Initial social media promotion was undertaken to highlight the investment we are making in new Street Litter Bins. Future activity will focus on ‘good news stories’ with targeted messaging such as our high level of recycling in the city centre and lower levels of litter achieved in areas which have received their new street litter bins.

• **Future Activity**

Looking towards encouraging residents to take pride in their local area, bespoke neighbourhood advertising is being developed complementing our citywide branding. Each street litter bin in the city will have ‘People Make (local neighbourhood name) Cleaner’ advertising on their local bins. Social media promotion is planned around the launch of this neighbourhood focused branding.

The Communications Strategy for this programme continues to be revised and refreshed to ensure that all appropriate stakeholders are fully informed and able to influence the progression of the programme going forward.

7. **Summary**

The Street Litter Bin Programme Phase 1 was completed on 15 July 2018 and as has been outlined in this report; there are a number of approaches which have worked very well, including –

• The implementation of larger capacity bins.
• Utilising smart technology via the installation of smart bin sensors.
• Modernising operational procedures through the effective use of data.
• The implementation of an effective communications strategy.
• Positive engagement with key local stakeholders to modernise bin provision.
• Increased opportunities for residents and visitors in the city centre to recycle.
• Increased opportunities to engage with residents.

8. **Policy and Resource Implications**

**Resource Implications:**

| Financial: | £3m capital budget was approved in 2017/18. |
| Legal:     | n/a                                         |
| Personnel: | A dedicated team is in place for the 2 year programme. |

**Procurement:**

**Council Strategic Plan:**

The Street Litter Bin Replacement Programme supports the theme of ‘A Sustainable and Low Carbon City’ and as aligned to Council Strategic Plan Priority Nos.64 and 66.

The Street Litter Bin Replacement Programme will improve the city’s cleanliness through improved bin containment. It also seeks to increase recycling opportunities for residents.

The Street Litter Bin Replacement Programme will improve the efficiency of our data collection through the introduction of smart technology.

**Equality and Socio Economic Impacts:**

Does the proposal support the Council’s Equality Outcomes 2017-22

Yes

What are the potential equality impacts as a result of this report?

Positive impact. Screening EQIA has been completed.

**Sustainability Impacts:**

*Environmental:* The Street Litter Bin Replacement Programme will improve the quality of environment for residents and visitors to the city.
Social, including Article 19 opportunities:
The Street Litter Bin Replacement Programme will work in partnership to improve the environment and Street Litter Bin Provision.

Economic:
Operational efficiencies from wheeled bin method of collection and reduced frequency of collection.

Privacy and Data Protection impacts:
N/A

9. Recommendations

It is recommended that committee notes the progress made to date.
Appendix 1

Detailed below are some comments from residents:

“The new bins are not only smart they are highly visible and make the dispensing of casual rubbish easy for residents and the many people that pass through Dennistoun to work. I have noticed greater responsibility in dog litter too - they are a great improvement in the community and I’d welcome them as a permanent feature”.

“Both Scott and I like the new bins and we hope they are there to stay. The design makes it much harder for scavenging seagulls to rake through them; an annual summer occurrence with the old bins”.

The key lesson learned is that positive partnership working with Elected Members, Community Councils, Residents Community Groups and Housing Associations can add real value to the Street Litter Bin Replacement Programme.

Old Bin Provision

New Bin Provision
## Appendix 2

<table>
<thead>
<tr>
<th>Issue</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Graffiti</strong> – number of incidents with graffiti found on new bin housings in city centre</td>
<td>Issued staff with anti-graffiti wipes, use of CSG to clean bins and assess bin housing coating as part of new specification.</td>
</tr>
<tr>
<td><strong>Ashtrays</strong> – issue with counter-weight mechanism not returning unit to horizontal</td>
<td>Supplier made adjustments to mechanism and any necessary changes will be included in new specification.</td>
</tr>
<tr>
<td><strong>Washing/Cleaning of Bins</strong> – during period of hot weather/lack of rain during the summer there was a build-up of detritus and some odour issues</td>
<td>CSG providing service to clean housings and new tender developed for a be-spoke wheeled bin cleaning system. Delivery expected November 2018.</td>
</tr>
<tr>
<td><strong>Advertising Panels</strong> – some vandalism and damage to panels within city centre area</td>
<td>Existing bins are being retrofitted with new Perspex panels. New tender specification will include these design changes.</td>
</tr>
<tr>
<td><strong>Business Waste</strong> – some commercial waste has been noted within these new bins</td>
<td>Continue to analyse waste content of bins and liaise with commercial waste enforcement officers where required.</td>
</tr>
<tr>
<td><strong>Servicing Frequency</strong> – footfall within the city during the summer was extremely high due to the good weather and high profile events.</td>
<td>Use of bin sensor data and new integrated management system (Yotta) to analyse trends in bin fill rates depending on time of year, weather conditions, events, school term time/holidays. Servicing frequencies and routing will be optimised to improve efficiencies and ensure bins do not overflow.</td>
</tr>
</tbody>
</table>